Idaho State Assessment of Forest Resources (SAFR)
Response to Comments Received from Draft # 2

Responses prepared by Dave Stephenson and Steve Kimball, Project Co-leaders

General comments about data sets used:

Several comments were about the source of datasets and the concern that some data didn't seem to match observed on-the-ground conditions. As the Core team reviewed the available data, we recognized that some areas /ownerships had very good information, while others had none or the information was proprietary. Trying to combine data from many different sources for the same issue or sub-issue, and to do so in a way that would be equitable for areas that didn't have data, was beyond the resources we had available for this assessment. For this reason, we tried to use statewide datasets whenever possible, though these may not have the best local data if these have not been incorporated. It is our hope that before the next assessment, there will be greater effort between all agencies—local, state and Federal—to coordinate and share data for better consistency and greater coverage statewide. We plan to include in the response strategy a list of data gaps that, if available, would strengthen the assessment in its next iteration. Many of the points brought up will be on that list.

Response to Specific Comments from the Clearwater and Nez Perce National Forests:

Issue: Relative Risk to Forest Health: *Page 6 of the more robust document talks to White Pine Blister Rust and that the layer was developed from: 1) potential vegetation layer and 2) a table delineating WWP with the IPNF providing both datasets. How did the IPNF impute the information for the Clearwater NF? And the Nez Perce NF? And other lands? If the objective of the layer is to identify probable areas of concern for blister rust which parallels WP habitat, what constituted moderate from high?Only the IPNF received high ratings. Rationale? The Clearwater Forest has been trying to restore WP back into its portion of this 5 million acre WP ecosystem. We are still experiencing mortality of young trees – many planted with the first generation of rust resistant stock and we have lost much of our WP sites to occupation by GF and DF.*

> Response: The core team worked with Forest Service Forest Health Specialist Carol Randall in Region 1 on this issue. As you mentioned, Carol provided data in the form of a potential vegetation layer and a table showing the likelihood of Western White Pine. The map and table were merged to form a 3-class rating of blister rust potential. There is some coverage of the Clearwater and Nez Perce National Forests in these data sets and in the final rating. For more information on the rationale please discuss this with Carol Randall.

*Page 6 also speaks to Mountain Pine Beetle**.** We were pleased to see that the 1990-2008 aerial dataset were used. The way the spread potential of MPB was calculated seemed excellent. Was the impact of potential spread from neighboring states (ie Lolo pass) considered? Impact still looks low even with the adjustment from draft 1 to draft 2.*

Response: Yes, the data and analysis extends beyond the boundaries of the state. After running the analysis, we clipped the result to the Idaho boundary.

Noxious weeds in the Clearwater and Nez Perce Forests is under-represented by using the Dec 2005 BLM dataset. It was surprising to see major travel ways – Highway 12 to name one – as unranked for weeds.

Response: We used the best available statewide data—a combination of BLM and Idaho Department of Agriculture data. We ran this by Janet Valle, Region 4 Pesticide and State Noxious Weed Grant Coordinator, and she felt this was the best to use and incorporated NF lands. However, this is an example of where coordination and sharing of data in the future may yield a better dataset. For example, if the National Forests can incorporate local geospatial data on weeds into the Idaho Department of Agriculture statewide noxious weeds database, we will ultimately have better overall data to work with.

Climate Change - Used Rehfeldt's data modeling for 3 key species……PP, LP and DF….did not use Western larch?? Overall, map probably pretty good.

Response: Again, this was a recommendation of a small committee of Forest Health folks who worked with the Core Team. There are others within the Region 1 office with serious concerns about using the climate change models at all. We discussed this in our last stakeholder meeting, and the consensus was to leave it in, recognizing it was given a lower relative weight (final score) compared to the other information to accommodate for the uncertainties in the data. That is, it will have only a very small impact on the final maps. Still, it was felt this was an important issues and at least gives us a heads up as something to consider as we develop projects in various areas.

***Issue: Relative Risk to Communities and Ecosystems from Wildfires.** Concern that we need to look across the State line to the potential impacts an "event" on the Idaho state line might cause to the neighboring state (in particular MT). For instance, on the Clearwater our prevailing winds blow our fires into MT for them to deal with and they have urban interface right on the other side. In addition, we impact their airshed with our smoke. Seems that should affect the ranking. Narrative never really defined "uncharacteristic fire". As some of the 1910 LP gets infected with MPB and dies, fires may be large and stand replacing, though that may be characteristic of LP stands, is not necessarily acceptable as they sweep across the landscape and threaten communities. Smaller communities such as Elk City, Dixie, etc seem to be under-ranked for risk especially given the fuels situation surrounding them.*

Also, as the Payette brought up in the call, social impacts of WUI fires aren't adequately represented by the date layers.

Response: For Community Fire Risk we used a model and data developed in 2007 by the Idaho Fire Plan Working Group. The Core Team felt that the work that went into this model and its wide acceptance with all agencies in the state made it ideal. This layer does show the WUI areas

near communities that have the highest probability of impacts. The model used considers fire risk and hazard relative to communities and inhabited areas. It doesn't consider social impacts beyond where the impacts are most likely to occur—we are unaware of geospatial data that informs this. In the Resource Strategy, we intend to look closer at potential social impacts to communities and how activities in the future could help mitigate those, and make this a part of the long term strategy.

With regards to smoke, we focused on smoke impact zones and what communities can do to lower the impact (such as increase canopy to filter out PM). We did initially consider trying to capture how Idaho fires might affect Montana as you suggest, but we didn't have the existing data or resources to model something that complex. However, one of the requirements of the Strategy is to consider multi-state issues, and this may be one of those as we work with neighboring states.

We have added a definition of "Uncharacteristic Wildfire" to the explanation of the issue in the SAFR. The definition used is from the Forest Service Cohesive Strategy for Protecting People and Sustaining Resources in a Fire-Adapted Ecosytem (2000).

With regard to Mountain Pine Beatle impact, we recognize this may be something not getting captured in either the fire data or the forest health data. We considered ways to use mountain pine beetle mortality mapping to show increased risk to wildfire but encountered a lack of data or analysis showing the relationship between mortality and increased wildfire risk. It seems to be accepted that wildfire risk can increase in the first few years after mortality when needles are red, and then again years later when trees start falling over and add to ground fuels. However, we could find no empirical data or analysis that linked the mortality mapping in Idaho to increased fire risk. More analysis is needed to correlate the amounts, timing, pattern of mortality in stands and on the landscape with increased fire risk so this can be represented geospatially. We have talked with fire ecologists and they agree that this is a data gap and more research and analysis is needed.

Issue: Potential Loss of Canopy to Development, Urbanization and Recreation. *It is unfortunate that the data sets for industrial forestlands (with REIT and TIMO) was unavailable as we feel the development potential of private industrial lands that will impact our forests is not represented. Highway 12 is one of the three east-west highways crossing Idaho and is not far from the population center of Missoula or the Bitterroot Valley, and on its eastern edge, checkerboard ownership causes one to pause as this as prime real estate for development. There have been several relatively large land exchanges that have occurred in the State in the past 10 years and several more proposed. Has someone calculated the impact of those exchanges on potential loss of canopy*? *The map on page 57 showing development risk based on estimated changes in housing density within Idaho may make more sense if a "public lands layer" were turned on which then shows why lands are not at risk……..unless there is a land exchange. Similar comment for the off highway recreation pressure map, would suggest that the "wilderness area layer" be turned on. OK to mask out on the composite map but would be nice on the Appendix maps.*

Response: With regard to TIMO's and REIT's—as noted in the write-up, we wanted to include these but didn't have the necessary information. Perhaps in the next assessment . . . With respect to your question on the impact of land exchanges, we are unaware of such a study.

Land ownership—we discussed including land ownership at the last stakeholder meeting and will be putting together an interactive web-mapping site in which folks can turn these layers on and off to better focus on the areas of interest/ownerships to them.

With the exception of a few of the issue layers (such as Forest Based Markets), we ran the analysis on all lands. Wilderness areas were not masked out until the end, and then in such a way that it did not impact the analysis, but just covered those areas up. As also noted in the write-up, many of the datasets, such as the aerial detection survey, weeds database, etc., did not include the wilderness areas. Therefore, these areas tend to be underrepresented in the final assessment. That doesn't imply they are unimportant and we will note this in future final documents.

***Issue: Relative Potential Benefit to Wildlife and Biodiversity** . They used wildlife information from Idaho CDC. Same as we do, so things look pretty good to me. No glaring problems with the assessment. Would like an explanation of the map on page 60 (Focal Areas) and how that is consistent with the narrative on page 22. Elk and a variety of other species are in need of conservation and in fact occur on the Clearwater.*

Response: We worked very closely with Idaho Fish and Game and the Nature Conservancy on this issue, and made many adjustments along the way. IDF&G and the stakeholders are satisfied with this map. Because it overlays a number of datasets, an area would have to score well in all or most of them to also be rated high in the final wildlife map. Detailed information on Focal Areas can be found on the IDF&G website at http://fishandgame.idaho.gov/ifwis/ifwisweb/IDCWCS/FA/. Note that on of 10-08-09, this page was down for maintenance.

***Issue: Relative Potential Benefit to Sustainable Forest-Based Market.** In reviewing the market area that we work, given the issue process, it would seem that the mill in Plummer would create a "red zone" as they pulled material to that facility. Moscow has a biomass facility (U of I) that is drawing in material from that circle as well. The Lewiston facilities rely on wood from a larger circle, including north of Moscow (palouse). Overall, the area around and north of Moscow seems to be under-ranked.*

Response: Many folks pointed out the anomalies in this map. After reviewing the model in more detail, we realized it wasn't portraying what we intended or thought it did. This map has been changed and the areas noted are now properly displayed.

Comments from the Salmon-Challis National Forest

The assessment seriously misrepresents both the forest health condition and the risk of uncharacteristic wildfire on the Salmon-Challis NF. Who are your stakeholders? I am interested in knowing if any are from

this area. We are concerned about the credibility of the SAFR in guiding funding allocations when there is a disparity of information for portions of the state (like the S-C NF).

Response: See the answer above to similar questions asked by the Clearwater-Nez Perce Forests.

With respect to funding decisions, our understanding is that this assessment is focused on S&PF funds going to states. Historically, States have been awarded funds for specific programs (i.e. Forest Stewardship, Urban & Community Forestry, etc.), and each program has used these funds independent of the other programs in areas which may or may not be targeted in terms of need/benefit. Congress doesn't like that approach because they don't know if the funding is going to best or highest need projects, and it's hard to understand exactly what the overall benefit is on the landscape. The new S&PF paradigm is Focus-Priority-Outcome. Focus on key issues, prioritize where these issues are greatest, and develop projects in partnership with others to achieve measurable outcomes in addressing these issues on a landscape scale. Rather than focusing on our specific S&PF programs as in the past, we plan to focus on the issues, utilizing an integrated suite of S&PF programs to address them.

For other agencies and organizations, we view the assessment/strategy as a way to identify opportunities for collaborative projects that leverage resources and may help garner additional resources through grants, etc. As we noted, it wasn't intended to identify all the high priority areas or issues within any specific land management boundary. It hopefully gets us to the general areas that are important relative to others, and identifies some of the key drivers on those areas that will help us develop strategies that will translate into future projects.

A list of Stakeholders involved with the assessment is listed on the IDL web page for this project: http://www.idl.idaho.gov/bureau/ForestAssist/safr_index.html. In developing the assessment, we wanted to gain good representation from all key organizations, agencies and advisory groups. We felt the best way to do this was to have representatives from these groups on our core development team, and have them serve as liaison for the organization they represented. For Region 1, we had Craig Glazier and for Region 4, Steve Winward. Scott Bell, our liaison with Region 1 and 4 S&PF, was also very involved in soliciting input from FS staff. We received a fair number of FS staff comments throughout the process and tried to incorporate them as best as we could, acknowledging that there are many different partners involved whose concerns also need to be addressed. Many of these comments dealt with the very issues mentioned above. We will consider a better way to do this in future assessments—perhaps it is more appropriate to bring in folks directly from the NFS.

Comments from Mark Jensen, R1 Analyst

- *The current analysis could be greatly improved through the use of hierarchical logic model designs. Benefits of this approach include: a model design that explicitly links all component*

propositions to the final priority map; a structure that will easily facilitate additional information and new resource propositions over time; provide a meta data structure for consistent evaluations over time; the use of fuzzy membership functions in the evaluation of data sources rather than classical rule based systems; and the ability to conduct robust statistical evaluations of ecosystem conditions over time. The conversion of the current data themes and priority maps to a logic based structure (as facilitated in EMDS) could be done relatively easily and in a timely manner. We recommend that the Core Development Team consider this activity.

- *The use of explicit decision models in the future development of the Response Strategy is highly recommended. Benefits of this approach have been eluded to previously in this review and are more specifically described in Appendix A. Development of suggested decision models is a very straight forward process and they could easily be constructed and run within the time line for development of the Response Strategy.*

  Response: These are excellent recommendations. Our current challenges are time and resources—both of which are very limited. We adapted a weighted overlay analysis model recommended by the USFS S&PF National office. This type of analysis is required for the Spatial Analysis Project (SAP), which identifies private forest lands with high stewardship potential. Our understanding is that the majority of other states are using this approach. We feel our adaptation of this process which looked at issues informed by data, attempting to remove most of the bias inherent in a Delphi process of data weighting, and a roll-up to a matrix that allowed for a logical relative blending of threats/benefits in the final map was a significant improvement. At this time, we simply don't have the resources to transition to a new model with which we are unfamiliar. However, we are interested in learning more about these models for future assessments.

Again, we appreciate your comments. As noted above, we have modified a number of the issues to accommodate the feedback from the NF's and many other stakeholders. While we are unable to address them all for a variety of reasons, we do feel confident the assessment will be a valuable tool as we look for ways to focus our efforts more effectively throughout the state. I expect it will easily identify enough areas to keep us busy for the next five years. Draft 3 of the assessment is now posted online at http://www.idl.idaho.gov/bureau/ForestAssist/safr_index.html.

One last note—there is also a National Assessment of Forest Resources underway being done by the FS. That may also have an impact on NF's. How that will tie into state assessments is unclear to us at this time. This is something the Forest Supervisors may wish to check into, though.